Inside the Black Box:
Deconstructing Social and Peer Support


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Evidence
Outcomes of Peer Support – Major Reviews


Emerging Results from Peers for Progress Projects

Implemented in all 14 project sites

On behalf of the Peers for Progress Investigators
Emerging Results from Peers for Progress Projects

- Feasibility
- Reach, Engagement
- Efficacy, Effectiveness
- Sustainability
- Spread and Adoption

Mean baseline HbA1c = 8.92%
86 of 102 finished program in Vietnam
68% of eligibles participate, 75% retention in Cambridgeshire over 1 year

On behalf of the Peers for Progress Investigators
Emerging Results from Peers for Progress Projects

- Feasibility
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Improved HbA1c, BMI, BP, QOL

On behalf of the Peers for Progress Investigators

Emerging Results from Peers for Progress Projects

Thailand: Two years after end of funding, VHVs still doing diabetes activities
South Africa: After 2+ years, increased enrollment, local funding
Uganda: Patients scheduled for appointments on same clinic day as their partners
Cambridgeshire, England, October, 2013: several hundred peer leaders and participants met to discuss ongoing organizational structure for program
Not sustaining the program, but digestion into existing routines and activities
Emerging Results from Peers for Progress Projects

- Feasibility
- Reach, Engagement
- Efficacy, Effectiveness
- Sustainability
- Spread and Adoption

WellMed extends from 15 to all 23 sites

On behalf of the Peers for Progress Investigators

Systematic Review of Evidence Among Publications on Peer Support

• 01/01/2000 – 5/31/2011: “peer support,” “coach,” “promotora” etc.

• 66 separate studies met criteria of:
  – Provided by nonprofessional
  – Support for multiple health behaviors over time (i.e., not isolated or single behaviors)
  – Not simply peer implementation of class

• Preliminary outcomes:
  – Significant within- or between-group changes: 83.3% of reports using controlled designs

Cost Effectiveness

CHWs for Diabetes Management along Mexico-US Border (Ryabov Public Health 2014 128: 636-642)
- Monthly home visits by CHWs over 1 year reduced HbA1c from 7.6 to 6.7% vs 7.7 to 7.4% in controls (p = 0.03)
- Incremental cost per QALY = $13,810

Encourage Program in Alabama (C. Campbell, PhD Dissertation, University of Alabama-Birmingham, 2014)
- 59% probability of being cost-saving
- 55% to 93% probability of being cost-effective, depending on assumptions, inclusion/exclusion, e.g., higher probability for those with depression or poorer baseline clinical status

In FQHC in Denver (Whitley et al J Hlth Care Poor Underserved 2006 17: 6-15)
- Shifted costs from urgent care, inpatient care, and outpatient behavioral health care
- Increase utilization of primary and specialty care visits.
- ROI = 2.28:1.00.

- 3 of 4 projects in cost analysis emphasized peer supporters
- Cost per Quality Adjusted Life Year (QALY) = $39,563 (well below $50,000 criterion for good value)

- Three to four CHW home visits over 6 mos and liaison with care team
- ROI: $5.58 saved per dollar spent

- CHWs and nurse educator: home visits, self-mgmt education, individual counseling
- $10,995 to $33,319 per QALY
- Especially cost-effective among those with HbA1c > 9%

Preventing Rehospitalization in Schizophrenia, Depression, Bipolar Disorder (Sledge et al, Psychiatr. Serv. 2011  62:541--44 )
- Recovery Mentors provided individualized frequency, mode, content of support
- Over 9 mos: 0.89 vs 1.53 hospitalizations, 10.08 vs 19.08 days in hospital (p < 0.05)

- Education about psychological problems, ways of coping, and interpersonal therapy delivered by lay health counselors with primary care and psychiatric back-up
- 30% decrease in prevalence, 36% in suicide attempts, 4.43 fewer days no work/reduced work in previous 30 days.
- Lowered time costs resulted in Intervention being cost effective and cost saving

Reaching the Hardly Reached
Reaching Those “Hardly Reached”: Greatest Improvements for Those with Low Initial Medication Adherence

Clinical Setting  Six safety-net primary care clinics serving patients covered by Medicare/Medical or San Francisco’s coverage for uninsured residents

- Majority of patients were non-white, ethnically and culturally diverse

Contact  Avg. of 7.02 interactions with coach, including 5.37 telephoned calls

Changes in HbA1c at 6 Months (p = 0.01)

Meta-Analysis

Characteristics associated with being “hardly reached”:

- Individual (e.g., psychological factors)
- Demographic (age, sex, socioeconomic status)
- Cultural/Environmental (e.g., social network, infrastructure)

Diverse health problems; Most common:

- Maternal and child health (25.5%)
- Diabetes (17.0%)
- Other chronic diseases (14.9%)

Results

- 44/47 papers (94%) reported significant changes favoring peer support.
- 55.1% of intended population agreed to participate
- 78.6% of enrollees actually participate
- Strategy to promote trust and respect associated with greater retention: 82.8% vs 48.1% (p=0.0027)
- 5 of 6 analyses of moderators found greater benefits of peer support among individuals characterized by disadvantage, such as low health literacy.
Peer Support, Multimorbidity and Unwanted, Avoidable Care
Jade and Pearl in Hong Kong
Juliana C. Chan and colleagues, Hong Kong Institute of Diabetes and Obesity; The Chinese University of Hong Kong; Prince of Wales Hospital

JADE – Structured Care Management (Chan et al Diabetes Care 2009 32: 977–982.)
• Algorithm and registry based care
• Initial appraisal and report to PCP
• Quarterly reports, including to patient
• Initial patient education session

Nota Bene: JADE is the Control Group

PEARL – Peer Support (Chan, Am Diab Assoc, June, 2012)
• Peers work through and trained by nurses
• Peer support classes
• Individual contacts:
  – Protocol: 12 over 12 mos
  – Average of 17

20% Above Cut-Off for Appreciable Distress
(Total Score on Depression, Anxiety and Stress Scale > 17)

Change Scores

<table>
<thead>
<tr>
<th>Depression</th>
<th>Anxiety</th>
<th>Stress</th>
<th>Total</th>
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DASS – Depression Anxiety Stress Scale  All ps < 0.05
(*Adjusted for DASS_Depression_Pre, DASS_Anxiety_Pre, and DASS_Stress_Pre)

DDS – Diabetes Distress Scale

Chan, J. et al *JAMA Internal Medicine.* 2014 174: 972-981
20% with High Distress $\rightarrow$ 40% Hospitalizations

Likelihood of Hospitalization

- High Distress: 60.00%
- Low Distress: 30.00%
- High Distress/ Peer Support: 20.00%

Chan, J. et al *JAMA Internal Medicine.* 2014 174: 972-981
Ubiquitous Value of Emotional Expression and Understanding

"When I knew I had diabetes, I felt upset and that my life is meaningless. When I joined the peer support program, I found that many people have the same illness as me, but they lived very well. Some are more than 80 years old. This encouraged me. I also can live long and healthy if I can control my blood sugar and managed my life suitably. “

(61-year-old female, Da Qing community)

"I feel that the 'Peer Group' is like my second family. The people in the group are so kind. Normally, I did not like to talk about my illness with other people, but in here I can talk about my disease. We also discussed diet, activities, medicine and blood sugar control.......“

(66-year-old female, He Yedi community)
Reaching Populations
3,787 PATIENTS WITH DIABETES

<table>
<thead>
<tr>
<th>High Need Group</th>
<th>Regular Care Group</th>
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</thead>
<tbody>
<tr>
<td>• HbA1c &gt; 8%, Psychosocial Distress, Physician’s Referral</td>
<td>• Quarterly contacts, encourage clinical care and use of resources (e.g., group classes) and self-management</td>
</tr>
<tr>
<td>• 471 of the 3,787</td>
<td>• Transition to High Need as needed</td>
</tr>
<tr>
<td>• Bi-weekly contacts for 12 weeks</td>
<td></td>
</tr>
<tr>
<td>• Monthly contact for 6 months until no longer meet criteria for High Need or until progress has stabilized</td>
<td></td>
</tr>
<tr>
<td>• Quarterly thereafter</td>
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3,787 PATIENTS - Reach and Effectiveness

<table>
<thead>
<tr>
<th>Regular Need Group</th>
<th>High Need Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <em>Compañeros</em> reached 82%</td>
<td>• <em>Compañeros</em> reached 88%</td>
</tr>
<tr>
<td>• HbA1c change over 2 years 8.22% to 8.14%, <em>p</em> &lt;.05</td>
<td>• HbA1c change over 2 years 9.43% to 9.16%, <em>p</em> = .01</td>
</tr>
<tr>
<td></td>
<td>• % with HbA1c &lt; 8%: 31.6% to 41.3%</td>
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Peer Support Across the Prevention & Care Continuum

- Screening & Diagnosis
- Appropriate Treatment
- Treatment to Target
- Quality of Life
- Secondary Prevention
- Palliative & End-of-Life Care
- Primary Prevention
- Survivorship
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